

10/589561

1/59 IAP11 Rec'd PCT/PTO 16 AUG 2006

## SEQUENCE LISTING

&lt;110&gt; FIVE PRIME THERAPEUTICS, INC.

<120> NOVEL APO2L AND IL-24 POLYPEPTIDES, POLYNUCLEOTIDES,  
AND METHODS OF THEIR USE

&lt;130&gt; 8940-0037.00304

&lt;140&gt; PCT/US05/005221

&lt;141&gt; 2005-02-18

&lt;150&gt; 60/647,013

&lt;151&gt; 2005-01-27

&lt;150&gt; 60/546,385

&lt;151&gt; 2004-02-20

&lt;160&gt; 237

&lt;170&gt; PatentIn Ver. 3.3

&lt;210&gt; 1

&lt;211&gt; 540

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys Ala Leu Gly Arg  
50 55 60  
Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His Ser Phe Leu Ser  
65 70 75 80  
Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His Glu Lys Gly Phe  
85 90 95  
Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln Glu Glu Ile Lys  
100 105 110  
Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr Ile Tyr Lys Tyr  
115 120 125  
Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser Ala Arg Asn Ser  
130 135 140  
Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser Ile Tyr Gln Gly  
145 150 155 160  
Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe Val Ser Val Thr  
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Phe Leu Val Gly  
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<210> 23  
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Met Ala Met Met Glu Val Gln Gly Gly Pro Ser Leu Gly Gln Thr Cys  
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Val Leu Ile Val Ile Phe Thr Val Leu Leu Gln Ser Leu Cys Val Ala  
20 25 30

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Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Gln Asp Lys  
35 40 45

Tyr Ser Lys Ser Gly Ile Ala Cys Phe Leu Lys Glu Asp Asp Ser Tyr  
50 55 60

Trp Asp Pro Asn Asp Glu Glu Ser Met Asn Ser Pro Cys Trp Gln Val  
65 70 75 80

Lys Trp Gln Leu Arg Gln Leu Val Arg Lys Met Ile Leu Arg Thr Ser  
85 90 95

Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln Asn Ile Ser Pro  
100 105 110

Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly  
115 120 125

Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu  
130 135 140

Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly  
145 150 155 160

His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile  
165 170 175

His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe  
180 185 190

Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln  
195 200 205

Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys  
210 215 220

Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr  
225 230 235 240

Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile  
245 250 255

Phe Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala  
260 265 270

Ser Phe Phe Gly Ala Phe Leu Val Gly  
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<210> 24

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<213> Homo sapiens

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Glu Leu Lys Gln Met Ile Leu Arg Thr Ser  
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<210> 26  
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 <212> PRT  
 <213> Homo sapiens

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Met Lys Thr Cys Trp Lys Ile Pro Val Phe Phe Phe Val Cys Ser Phe
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Leu Glu Pro Trp Ala Ser Ala
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<210> 27  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 27

Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu Gln  
 1 5 10 15

Gly

&lt;210&gt; 28

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 28

Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser  
 1 5 10

&lt;210&gt; 29

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 29

Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu Gln  
 1 5 10 15

Gly Pro Cys

&lt;210&gt; 30

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 30

Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu Gln  
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&lt;210&gt; 31

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 31

Met Ala Leu Leu Trp Gly Leu Leu Val Leu Ser Trp Ser Cys Leu  
 1 5 10 15

&lt;210&gt; 32

&lt;211&gt; 30

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 32

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu  
 20 25 30

&lt;210&gt; 33

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 33

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu  
 20 25

&lt;210&gt; 34

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 34

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu Gly Pro  
 20 25 30

Ser

&lt;210&gt; 35

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 35

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
 1 5 10 15

Leu Leu Leu Leu Leu Leu Leu  
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&lt;210&gt; 36

&lt;211&gt; 26

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 36

Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
 1 5 10 15



Leu Leu Leu Leu Leu Leu Leu Leu Pro  
20 25

<210> 37  
<211> 32  
<212> PRT  
<213> Homo sapiens

<400> 37  
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1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu Gly Pro  
20 25 30

<210> 38  
<211> 27  
<212> PRT  
<213> Homo sapiens

<400> 38  
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
1 5 10 15

Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala  
20 25

<210> 39  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 39  
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
1 5 10 15

Leu Leu Leu Leu Leu Leu  
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<210> 40  
<211> 35  
<212> PRT  
<213> Homo sapiens

<400> 40  
Met Asp Ser Met Pro Glu Pro Ala Ser Arg Cys Leu Leu Leu Leu Pro  
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Leu Leu Leu Leu Leu Leu Leu Leu Pro Ala Pro Glu Leu Gly Pro  
20 25 30

Ser Gln Ala  
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<210> 41  
<211> 24  
<212> PRT  
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<400> 41  
Met Arg Arg Met Trp Ala Thr Gln Gly Leu Ala Val Ala Leu Ala Leu  
1 5 10 15

Ser Val Leu Pro Gly Ser Arg Ala  
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<210> 42  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 42  
Met Arg Arg Met Trp Ala Thr Gln Gly Leu Ala Val Ala Leu Ala Leu  
1 5 10 15

Ser Val Leu Pro Gly  
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<210> 43  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 43  
Met Asp Leu Arg Gln Phe Leu Met Cys Leu Ser Leu Cys Thr Ala Phe  
1 5 10 15

Ala Leu Ser

<210> 44  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 44  
Met Asp Leu Arg Gln Phe Leu Met Cys Leu Ser Leu Cys Thr Ala  
1 5 10 15

<210> 45  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 45  
 Met Asp Leu Arg Gln Phe Leu Met Cys Leu Ser Leu Cys Thr Ala Phe  
 1 5 10 15

Ala

<210> 46  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 46  
 Met Lys Thr Cys Trp Lys Ile Pro Val Phe Phe Phe Val Cys Ser Phe  
 1 5 10 15

Leu Glu Pro Trp Ala Ser Ala  
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<210> 47  
 <211> 21  
 <212> PRT  
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<400> 47  
 Met Met Leu Arg Val Leu Val Gly Ala Val Leu Pro Ala Met Leu Leu  
 1 5 10 15

Ala Ala Pro Pro Pro  
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<210> 48  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 48  
 Met Met Leu Arg Val Leu Val Gly Ala Val Leu Pro Ala Met Leu Leu  
 1 5 10 15

Ala

<210> 49  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 49  
 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala  
 1 5 10 15

Ile Pro Gly

<210> 50  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 50  
 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala  
 1 5 10 15

Ile Pro Gly Gly Leu Gly  
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<210> 51  
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 <212> PRT  
 <213> Homo sapiens

<400> 51  
 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala  
 1 5 10 15

Ile Pro

<210> 52  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 52  
 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala  
 1 5 10 15

<210> 53  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 53  
 Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala  
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<210> 54  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 54  
 Met Ser Met Leu Val Val Phe Leu Leu Leu Trp Gly Val Thr Trp Gly  
 1 5 10 15

Pro Val Thr Glu  
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<210> 55  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 55  
Met Ser Met Leu Val Val Phe Leu Leu Leu Trp Gly Val Thr Trp Gly  
1 5 10 15

<210> 56  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 56  
Met Ser Met Leu Val Val Phe Leu Leu Leu Trp Gly Val Thr Trp Gly  
1 5 10 15

Pro Val Thr Glu Ala  
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<210> 57  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 57  
Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu  
1 5 10 15

Leu Ala Ala Leu Leu Glu Ala Ala  
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<210> 58  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 58  
Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu  
1 5 10 15

Leu Ala Ala Leu  
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<210> 59  
<211> 26  
<212> PRT  
<213> Homo sapiens

20/59

<400> 59

Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu  
1 5 10 15

Leu Ala Ala Leu Leu Glu Ala Ala Leu Gly  
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<210> 60

<211> 21

<212> PRT

<213> Homo sapiens

<400> 60

Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu  
1 5 10 15

Leu Ala Ala Leu Leu  
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<210> 61

<211> 23

<212> PRT

<213> Homo sapiens

<400> 61

Met Arg Ala Leu Arg Asp Arg Ala Gly Leu Leu Leu Cys Val Leu Leu  
1 5 10 15

Leu Ala Ala Leu Leu Glu Ala  
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<210> 62

<211> 24

<212> PRT

<213> Homo sapiens

<400> 62

Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
1 5 10 15

Ala Ala Ala Ala Leu Ala Glu Gly  
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<210> 63

<211> 19

<212> PRT

<213> Homo sapiens

<400> 63

Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
1 5 10 15

Ala Ala Ala



<210> 64  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 64  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu  
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 Ala Ala Ala Ala Leu Ala  
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<210> 65  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 65  
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           1                  5                  10                  15  
 Ala Ala Ala Ala  
                           20

<210> 66  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 66  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu  
           1                  5                  10                  15  
 Ala Ala Ala Ala Leu Ala Glu Gly Asp Ala  
                           20                          25

<210> 67  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 67  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu  
           1                  5                  10                  15  
 Ala Ala Ala Ala Leu  
                           20

<210> 68  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 68

Met Arg Leu Arg Arg Leu Ala Leu Phe Pro Gly Val Ala Leu Leu Leu  
 1 5 10 15

Ala Ala Gly Arg Leu Val Ala Ala  
 20

&lt;210&gt; 69

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 69

Met Arg Leu Arg Arg Leu Ala Leu Phe Pro Gly Val Ala Leu Leu Leu  
 1 5 10 15

Ala Ala Gly Arg Leu Val Ala  
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&lt;210&gt; 70

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 70

Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Leu Ala Gly Leu Cys  
 1 5 10 15

Cys Leu Val Pro Val Ser Leu Ala  
 20

&lt;210&gt; 71

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 71

Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Leu Ala Gly Leu Cys  
 1 5 10 15

Cys Leu

&lt;210&gt; 72

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 72

Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Leu Ala Gly Leu Cys  
 1 5 10 15

Cys Leu Val Pro Val Ser Leu  
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<210> 73  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 73  
Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Leu Ala Gly Leu Cys  
1 5 10 15

Cys

<210> 74  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 74  
Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu  
1 5 10 15

Leu Ala Thr Pro Ala Gln Ala  
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<210> 75  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 75  
Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu  
1 5 10 15

Leu Ala

<210> 76  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 76  
Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu  
1 5 10 15

Leu Ala Thr Pro Ala Gln Ala His Leu  
20 25

<210> 77  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 77  
 Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu  
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Leu Ala Thr Pro  
                   20

<210> 78  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 78  
 Met Gln Ser Leu Met Gln Ala Pro Leu Leu Ile Ala Leu Gly Leu Leu  
           1                  5                  10                  15

Leu Ala Thr Pro Ala  
                   20

<210> 79  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 79  
 Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly  
           1                  5                  10                  15

Leu Leu Leu Leu Gly Glu Ser  
                   20

<210> 80  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 80  
 Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly  
           1                  5                  10                  15

Leu Leu Leu

<210> 81  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 81

Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly  
 1 5 10 15

Leu Leu Leu Leu  
 20

&lt;210&gt; 82

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 82

Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala  
 1 5 10 15

&lt;210&gt; 83

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 83

Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly  
 1 5 10 15

Leu Leu Leu Leu Gly  
 20

&lt;210&gt; 84

&lt;211&gt; 17

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 84

Met Gly Arg Pro Leu His Leu Val Leu Leu Ser Ala Ser Leu Ala Gly  
 1 5 10 15

Leu

&lt;210&gt; 85

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 85

Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala  
 1 5 10 15

Ile Pro

<210> 86  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 86  
 Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala  
           1                  5                  10                  15

<210> 87  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 87  
 Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys  
           1                  5                  10                  15

<210> 88  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 88  
 Met Lys Arg Val Leu Val Leu Leu Leu Ala Val Ala Phe Gly His Ala  
           1                  5                  10                  15

<210> 89  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 89  
 Met Lys Arg Val Leu Val Leu Leu Leu Ala Val Ala Phe Gly  
           1                  5                  10

<210> 90  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 90  
 Met Asn Ser Phe Ser Thr Ser Ala Phe Gly Pro Val Ala Phe Ser Leu  
           1                  5                  10                  15

Gly Leu Leu Leu Val Leu Pro Ala Ala  
                   20                  25

<210> 91  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 91

Met	Asn	Ser	Phe	Ser	Thr	Ser	Ala	Phe	Gly	Pro	Val	Ala	Phe	Ser	Leu
1				5					10					15	

Gly	Leu	Leu	Leu	Val	Leu	Pro	Ala
				20			

&lt;210&gt; 92

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 92

Met	Asn	Ser	Phe	Ser	Thr	Ser	Ala	Phe	Gly	Pro	Val	Ala	Phe	Ser	Leu
1				5					10					15	

Gly	Leu	Leu	Leu	Val	Leu	Pro	Ala	Ala	Phe	Pro
				20				25		

&lt;210&gt; 93

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 93

Met	Ala	Leu	Ser	Trp	Val	Leu	Thr	Val	Leu	Ser	Leu	Leu	Pro	Leu	Leu
1				5					10					15	

Glu Ala

&lt;210&gt; 94

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 94

Met	Ala	Arg	Val	Leu	Gly	Ala	Pro	Val	Ala	Leu	Gly	Leu	Trp	Ser	Leu
1				5					10					15	

Cys Trp Ser

&lt;210&gt; 95

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 95

Met	Ala	Arg	Val	Leu	Gly	Ala	Pro	Val	Ala	Leu	Gly	Leu	Trp	Ser	Leu
1				5					10					15	

Cys	Trp	Ser	Leu	Ala	Ile	Ala	Thr	Pro
			20					25

<210> 96  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 96  
 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu  
           1                  5                  10                  15

Cys Trp Ser Leu Ala  
                   20

<210> 97  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 97  
 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu  
           1                  5                  10                  15

Cys Trp Ser Leu Ala Ile Ala  
                   20

<210> 98  
 <211> 31  
 <212> PRT  
 <213> Homo sapiens

<400> 98  
 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu  
           1                  5                  10                  15

Cys Trp Ser Leu Ala Ile Ala Thr Pro Leu Pro Pro Thr Ser Ala  
                   20                  25                  30

<210> 99  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 99  
 Met Asp Tyr Tyr Arg Lys Tyr Ala Ala Ile Phe Leu Val Thr Leu Ser  
           1                  5                  10                  15

Val Phe Leu His Val Leu His Ser Ala Pro  
                   20                  25

<210> 100  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

29/59

<400> 100

Met Asp Tyr Tyr Arg Lys Tyr Ala Ala Ile Phe Leu Val Thr Leu Ser  
1 5 10 15

Val Phe Leu His Val Leu His Ser  
20

<210> 101

<211> 18

<212> PRT

<213> Homo sapiens

<400> 101

Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser  
1 5 10 15

Leu Thr

<210> 102

<211> 19

<212> PRT

<213> Homo sapiens

<400> 102

Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser  
1 5 10 15

Leu Thr Gln

<210> 103

<211> 16

<212> PRT

<213> Homo sapiens

<400> 103

Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser  
1 5 10 15

<210> 104

<211> 23

<212> PRT

<213> Homo sapiens

<400> 104

Met Lys Leu Ile Thr Ile Leu Phe Leu Cys Ser Arg Leu Leu Leu Ser  
1 5 10 15

Leu Thr Gln Glu Ser Gln Ser  
20

<210> 105  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 105  
 Met Leu Arg Arg Ala Leu Leu Cys Leu Ala Val Ala Ala Leu Val Arg  
           1                  5                  10                  15

Ala

<210> 106  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 106  
 Met Pro Arg Ser Cys Cys Ser Arg Ser Gly Ala Leu Leu Leu Ala Leu  
           1                  5                  10                  15

Leu Leu Gln Ala Ser Met Glu  
                   20

<210> 107  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 107  
 Met Pro Arg Ser Cys Cys Ser Arg Ser Gly Ala Leu Leu Leu Ala Leu  
           1                  5                  10                  15

Leu Leu Gln Ala Ser Met Glu Val Arg Gly  
                   20                  25

<210> 108  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 108  
 Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
           1                  5                  10                  15

Leu Gly Asp Leu Gln Ala Ala  
                   20

<210> 109  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 109  
 Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
 1 5 10 15

Leu Gly ASP Leu Gln Ala  
 20

<210> 110  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 110  
 Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
 1 5 10 15

Leu Gly

<210> 111  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 111  
 Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly  
 1 5 10 15

Pro Ala

<210> 112  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 112  
 Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly  
 1 5 10 15

Pro Ala Val Pro  
 20

<210> 113  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 113  
 Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly  
 1 5 10 15

Pro Ala Val Pro Gln  
 20

<400> 114  
Met Val Arg Met Val Pro Val Leu Leu Ser Leu Leu Leu Leu Gly  
1 5 10 15

```
<210> 115
<211> 18
<212> PRT
<213> Homo sapiens
```

```

<400> 115
Met Arg Ser Ala Ala Val Leu Ala Leu Leu Cys Ala Gly Gln Val
      1              5              10              15

```

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<210> 116
<211> 15
<212> PRT
<213> Homo sapiens
```

```
<400> 116
Met Arg Ser Ala Ala Val Leu Ala Leu Leu Cys Ala Gly Gln
      1           5           10           15
```

<210> 117  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 117  
Met Arg Ser Ala Ala Val Leu Ala Leu Leu Cys Ala Gly  
1 5 10

```
<210> 118
<211> 26
<212> PRT
<213> Homo sapiens
```

<400> 118  
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala  
1 5 10 15



Phe Cys Leu Leu Ala Leu Pro Arg Asp Ala  
20 25

<210> 119  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 119  
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala  
1 5 10 15

Phe Cys

<210> 120  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 120  
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala  
1 5 10 15

Phe Cys Leu Leu  
20

<210> 121  
<211> 28  
<212> PRT  
<213> Homo sapiens

<400> 121  
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala  
1 5 10 15

Phe Cys Leu Leu Ala Leu Pro Arg Asp Ala Arg Ala  
20 25

<210> 122  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 122  
Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala  
1 5 10 15

Phe Cys Leu Leu Ala  
20

<210> 123  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 123  
 Met Ala Arg Ser Asn Leu Pro Leu Ala Leu Gly Leu Ala Leu Val Ala  
           1                  5                  10                  15  
 Phe Cys Leu Leu Ala Leu Pro  
                           20

<210> 124  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 124  
 Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr Trp Glu  
           1                  5                  10                  15  
 Ser Gly Gln Val Leu Gly  
                           20

<210> 125  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 125  
 Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr Trp Glu  
           1                  5                  10                  15  
 Ser Gly

<210> 126  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 126  
 Met Met Lys Thr Leu Leu Leu Phe Val Gly Leu Leu Leu Thr  
           1                  5                  10

<210> 127  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 127  
 Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu  
           1                  5                  10                  15

Val Ser Leu Leu Ile Leu Gln Ala  
20

<210> 128  
<211> 29  
<212> PRT  
<213> Homo sapiens

<400> 128  
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu  
1 5 10 15

Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala Leu Gly  
20 25

<210> 129  
<211> 30  
<212> PRT  
<213> Homo sapiens

<400> 129  
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu  
1 5 10 15

Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala Leu Gly Ser  
20 25 30

<210> 130  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 130  
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu  
1 5 10 15

Val Ser Leu Leu Ile Leu Gln  
20

<210> 131  
<211> 31  
<212> PRT  
<213> Homo sapiens

<400> 131  
Met Asp Gly Ala Met Gly Pro Arg Gly Leu Leu Leu Cys Met Tyr Leu  
1 5 10 15

Val Ser Leu Leu Ile Leu Gln Ala Met Pro Ala Leu Gly Ser Ala  
20 25 30

<210> 132  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 132  
 Met Lys Val Leu Ala Ala Gly Val Val Pro Leu Leu Leu Val Leu His  
           1                  5                  10                  15

Trp Lys His Gly Ala Gly  
                   20

<210> 133  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 133  
 Met Lys Val Leu Ala Ala Gly Val Val Pro Leu Leu Leu Val Leu His  
           1                  5                  10                  15

Trp Lys His Gly Ala Gly Ser  
                   20

<210> 134  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 134  
 Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr  
           1                  5                  10                  15

Ser Gly

<210> 135  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 135  
 Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly  
           1                  5                  10                  15

<210> 136  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 136  
 Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr  
           1                  5                  10                  15

Ser

<210> 137  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 137  
 Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly  
 1 5 10

<210> 138  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 138  
 Met Lys Leu Leu Met Val Leu Met Leu Ala Ala Leu Ser Gln His Cys  
 1 5 10 15

Tyr Ala

<210> 139  
 <211> 30  
 <212> PRT  
 <213> Homo sapiens

<400> 139  
 Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu  
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln Val Ala  
 20 25 30

<210> 140  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 140  
 Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu  
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln Val Ala Ala Thr  
 20 25 30

<210> 141  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 141

Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu  
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln  
 20 25

&lt;210&gt; 142

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 142

Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu  
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly  
 20 25

&lt;210&gt; 143

&lt;211&gt; 31

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 143

Met Gln Ser Val Gln Ser Thr Ser Phe Cys Leu Arg Lys Gln Cys Leu  
 1 5 10 15

Cys Leu Thr Phe Leu Leu Leu His Leu Leu Gly Gln Val Ala Ala  
 20 25 30

&lt;210&gt; 144

&lt;211&gt; 26

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 144

Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu  
 1 5 10 15

Leu Leu Ala Leu Val Leu Ala Pro Arg Val  
 20 25

&lt;210&gt; 145

&lt;211&gt; 22

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 145

Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu  
 1 5 10 15

Leu Leu Ala Leu Val Leu  
20

<210> 146  
<211> 29  
<212> PRT  
<213> Homo sapiens

<400> 146  
Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu  
1 5 10 15

Leu Leu Ala Leu Val Leu Ala Pro Arg Val Leu Arg Ala  
20 25

<210> 147  
<211> 24  
<212> PRT  
<213> Homo sapiens

<400> 147  
Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu  
1 5 10 15

Leu Leu Ala Leu Val Leu Ala Pro  
20

<210> 148  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 148  
Met Ala Arg Gly Gly Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu  
1 5 10 15

Leu Leu Ala Leu Val Leu Ala  
20

<210> 149  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 149  
Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Cys  
1 5 10 15

Ala Ala Ala Ala Gly Ala Gly Lys Ala  
20 25

<210> 150  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 150  
 Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys  
           1                  5                  10                  15

Ala Ala Ala

<210> 151  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 151  
 Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys  
           1                  5                  10                  15

Ala Ala Ala Ala Gly Ala  
                   20

<210> 152  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 152  
 Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys  
           1                  5                  10                  15

Ala Ala

<210> 153  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 153  
 Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys  
           1                  5                  10                  15

Ala Ala Ala Ala  
                   20

<210> 154  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 154

Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys  
 1 5 10 15

Ala Ala Ala Ala Gly  
 20

&lt;210&gt; 155

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 155

Met Arg Leu Gly Pro Arg Thr Ala Ala Leu Gly Leu Leu Leu Leu Cys  
 1 5 10 15

Ala Ala Ala Ala Gly Ala Gly  
 20

&lt;210&gt; 156

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 156

Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala  
 1 5 10 15

Gly Thr Ser

&lt;210&gt; 157

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 157

Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala  
 1 5 10 15

Gly Thr

&lt;210&gt; 158

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 158

Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala  
 1 5 10 15

Gly Thr Ser Thr  
 20

```
<210> 159
<211> 24
<212> PRT
<213> Homo sapiens
```

<400> 159  
Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala  
1 5 10 15  
Gly Thr Ser Thr Gln Thr Gln Ser  
20

```
<210> 160
<211> 16
<212> PRT
<213> Homo sapiens
```

<400> 160  
Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala  
1 5 10 15

```
<210> 161
<211> 17
<212> PRT
<213> Homo sapiens
```

<400> 161  
Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala Thr Ala  
1 5 10 15

Gly

```
<210> 162
<211> 14
<212> PRT
<213> Homo sapiens
```

<400> 162  
Met Ala Trp Phe Ala Leu Tyr Leu Leu Ser Leu Leu Trp Ala  
1 5 10

```
<210> 163
<211> 17
<212> PRT
<213> Homo sapiens
```

<400> 163  
Met His Leu Leu Leu Phe Gln Leu Leu Val Leu Leu Pro Leu Gly Lys  
1 5 10 15

Thr

<210> 164  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 164  
 Met Pro Leu Gly Leu Leu Trp Leu Gly Leu Ala Leu Leu Gly Ala Leu  
 1 5 10 15

His Ala

<210> 165  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 165  
 Met Pro Leu Gly Leu Leu Trp Leu Gly Leu Ala Leu Leu Gly Ala Leu  
 1 5 10 15

His Ala Gln Ala  
 20

<210> 166  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 166  
 Met Pro Leu Gly Leu Leu Trp Leu Gly Leu Ala Leu Leu Gly Ala  
 1 5 10 15

<210> 167  
 <211> 29  
 <212> PRT  
 <213> Homo sapiens

<400> 167  
 Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu  
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu Leu Val Arg Ala Thr  
 20 25

<210> 168  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 168  
 Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu  
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu  
 20

<210> 169  
 <211> 28  
 <212> PRT  
 <213> Homo sapiens

<400> 169  
 Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu  
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu Val Arg Ala  
 20 25

<210> 170  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 170  
 Met Leu Pro Leu Thr Met Thr Val Leu Ile Leu Leu Leu Leu Pro Thr  
 1 5 10 15

Gly Gln Ala

<210> 171  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 171  
 Met Leu Pro Leu Thr Met Thr Val Leu Ile Leu Leu Leu Leu Pro Thr  
 1 5 10 15

Gly Gln

<210> 172  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 172  
 Met Leu Pro Leu Thr Met Thr Val Leu Ile Leu Leu Leu Leu Pro Thr  
 1 5 10 15

Gly Gln Ala Ala Pro  
 20

```
<210> 173
<211> 15
<212> PRT
<213> Homo sapiens
```

<400> 173  
Met Thr Ser Ile Leu Thr Val Leu Ile Cys Leu Gly Leu Ser Leu  
1 5 10 15

```
<210> 174
<211> 26
<212> PRT
<213> Homo sapiens
```

<400> 174  
Met Glu Asn Pro Ser Pro Ala Ala Ala Leu Gly Lys Ala Leu Cys Ala  
1 5 10 15

Leu Leu Leu Ala Thr Leu Gly Ala Ala Gly  
20 25

```
<210> 175
<211> 25
<212> PRT
<213> Homo sapiens
```

```

<400> 175
Met Glu Asn Pro Ser Pro Ala Ala Ala Leu Gly Lys Ala Leu Cys Ala
  1              5              10              15

```

Leu Leu Leu Ala Thr Leu Gly Ala Ala  
20 25

```
<210> 176
<211> 24
<212> PRT
<213> Homo sapiens
```

<400> 176  
Met Glu Asn Pro Ser Pro Ala Ala Ala Leu Gly Lys Ala Leu Cys Ala  
1 5 10 15

Leu Leu Leu Ala Thr Leu Gly Ala  
20

```
<210> 177
<211> 28
<212> PRT
<213> Homo sapiens
```

<400> 177  
 Met Glu Asn Pro Ser Pro Ala Ala Ala Leu Gly Lys Ala Leu Cys Ala  
 1 5 10 15

Leu Leu Leu Ala Thr Leu Gly Ala Ala Gly Gln Pro  
 20 25

<210> 178  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 178  
 Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu Gly  
 1 5 10 15

Thr Ala Trp Ala  
 20

<210> 179  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 179  
 Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu Gly  
 1 5 10 15

Thr Ala

<210> 180  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 180  
 Met Lys Gly Trp Gly Trp Leu Ala Leu Leu Leu Gly Ala Leu Leu Gly  
 1 5 10 15

<210> 181  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 181  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
 1 5 10 15

Ala Ala Ala Ala Leu Ala Glu Gly  
 20

<210> 182  
 <211> 19  
 <212> PRT  
 <213> Homo sapiens

<400> 182  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
           1                  5                  10                  15

Ala Ala Ala

<210> 183  
 <211> 22  
 <212> PRT  
 <213> Homo sapiens

<400> 183  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
           1                  5                  10                  15

Ala Ala Ala Ala Leu Ala  
                   20

<210> 184  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 184  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
           1                  5                  10                  15

Ala Ala Ala Ala  
                   20

<210> 185  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 185  
 Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
           1                  5                  10                  15

Ala Ala Ala Ala Leu Ala Glu Gly Asp Ala  
                   20                  25

<210> 186  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 186

Met Arg Ala Pro Gly Cys Gly Arg Leu Val Leu Pro Leu Leu Leu Leu  
 1 5 10 15

Ala Ala Ala Ala Leu  
 20

&lt;210&gt; 187

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 187

Met Ser Leu Gly Gln Ser Ala Cys Leu Phe Leu Ser Ile Ala Arg Ser  
 1 5 10 15

Arg Ser

&lt;210&gt; 188

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 188

Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala  
 1 5 10 15

Val Pro

&lt;210&gt; 189

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 189

Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala  
 1 5 10 15

Val Pro Thr

&lt;210&gt; 190

&lt;211&gt; 22

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 190

Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala  
 1 5 10 15

Val Pro Thr Ala Pro Ala  
 20



```
<210> 191
<211> 16
<212> PRT
<213> Homo sapiens
```

<400> 191  
Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala  
1 5 10 15

```
<210> 192
<211> 21
<212> PRT
<213> Homo sapiens
```

<400> 192  
Met Gln Arg Leu Gly Ala Thr Leu Leu Cys Leu Leu Leu Ala Ala Ala  
1 5 10 15

Val Pro Thr Ala Pro  
20

```
<210> 193
<211> 26
<212> PRT
<213> Homo sapiens
```

<400> 193  
Met Ser Ala Ser Lys Ile Pro Leu Phe Lys Met Lys Asp Leu Ile Leu  
1 5 10 15

Ile Leu Cys Leu Leu Glu Met Ser Phe Ala  
20 25

```
<210> 194
<211> 28
<212> PRT
<213> Homo sapiens
```

<400> 194  
Met Ser Ala Ser Lys Ile Pro Leu Phe Lys Met Lys Asp Leu Ile Leu  
1 5 10 15

Ile Leu Cys Leu Leu Glu Met Ser Phe Ala Val Pro  
20 25

```
<210> 195
<211> 18
<212> PRT
<213> Homo sapiens
```

<400> 195  
 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly  
           1                  5                  10                  15

Gly Thr

<210> 196  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 196  
 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly  
           1                  5                  10                  15

Gly Thr Trp Ala  
                   20

<210> 197  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 197  
 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly  
           1                  5                  10                  15

<210> 198  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 198  
 Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu  
           1                  5                  10                  15

Trp Ala

<210> 199  
 <211> 20  
 <212> PRT  
 <213> Homo sapiens

<400> 199  
 Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu  
           1                  5                  10                  15

Trp Ala Phe Cys  
                   20

<210> 200  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens

<400> 200  
 Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu  
           1                  5                  10                  15

Trp Ala Phe Cys Ala Pro Gly Ala Arg Ala  
                   20                  25

<210> 201  
 <211> 23  
 <212> PRT  
 <213> Homo sapiens

<400> 201  
 Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu  
           1                  5                  10                  15

Trp Ala Phe Cys Ala Pro Gly  
                   20

<210> 202  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 202  
 Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro  
           1                  5                  10

<210> 203  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 203  
 Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr Trp Ala  
           1                  5                  10                  15

<210> 204  
 <211> 14  
 <212> PRT  
 <213> Homo sapiens

<400> 204  
 Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr  
           1                  5                  10

<210> 205  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 205  
 Met Leu Leu Leu Leu Thr Leu Ala Leu Leu Gly Gly Pro Thr Trp Ala  
           1                  5                  10                  15

Gly

<210> 206  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 206  
 Met Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu Leu Thr  
           1                  5                  10                  15

Cys Glu Leu Ala Ala Glu Val Ala Ala  
                   20                  25

<210> 207  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 207  
 Met Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu Leu Thr  
           1                  5                  10                  15

Cys Glu Leu Ala Ala  
                   20

<210> 208  
 <211> 18  
 <212> PRT  
 <213> Homo sapiens

<400> 208  
 Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr Ser  
           1                  5                  10                  15

Val Ser

<210> 209  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 209

Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr Ser  
 1 5 10 15

&lt;210&gt; 210

&lt;211&gt; 15

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 210

Met Pro Pro Phe Leu Leu Leu Thr Cys Leu Phe Ile Thr Gly Thr  
 1 5 10 15

&lt;210&gt; 211

&lt;211&gt; 21

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 211

Met Gly Pro Val Arg Leu Gly Ile Leu Leu Phe Leu Phe Leu Ala Val  
 1 5 10 15

His Glu Ala Trp Ala  
 20

&lt;210&gt; 212

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 212

Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu  
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu Leu Val Arg Ala Thr  
 20 25

&lt;210&gt; 213

&lt;211&gt; 24

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 213

Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu  
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu  
 20

&lt;210&gt; 214

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 214

Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val Leu Leu  
 1 5 10 15

Leu Cys Ala His Val Val Thr Leu Leu Val Arg Ala  
 20 25

&lt;210&gt; 215

&lt;211&gt; 23

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 215

Met Glu Ile Cys Arg Gly Leu Arg Ser His Leu Ile Thr Leu Leu Leu  
 1 5 10 15

Phe Leu Phe His Ser Glu Thr  
 20

&lt;210&gt; 216

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 216

Met Glu Ile Cys Arg Gly Leu Arg Ser His Leu Ile Thr Leu Leu Leu  
 1 5 10 15

Phe Leu Phe His Ser Glu Thr Ile Cys  
 20 25

&lt;210&gt; 217

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 217

Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val  
 1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Leu Gly Val Pro Pro Arg Ser  
 20 25 30

&lt;210&gt; 218

&lt;211&gt; 34

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 218

Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val  
 1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Leu Gly Val Pro Pro Arg Ser  
20 25 30

Leu Ala

```
<210> 219
<211> 29
<212> PRT
<213> Homo sapiens
```

<400> 219  
Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val  
1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Leu Gly Val Pro  
20 25

```
<210> 220
<211> 30
<212> PRT
<213> Homo sapiens
```

<400> 220  
Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val  
1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Leu Gly Val Pro Pro  
20 25 30

```
<210> 221
<211> 27
<212> PRT
<213> Homo sapiens
```

<400> 221  
Met Trp Ala Pro Arg Cys Arg Arg Phe Trp Ser Arg Trp Glu Gln Val  
1 5 10 15

Ala Ala Leu Leu Leu Leu Leu Leu Leu Leu Gly  
20 25

```
<210> 222
<211> 26
<212> PRT
<213> Homo sapiens
```

```

<400> 222
Met Trp Cys Ala Ser Pro Val Ala Val Val Ala Phe Cys Ala Gly Leu
      1           5           10           15

```

Leu Val Ser His Pro Val Leu Thr Gln Gly  
20 25

<210> 223  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 223  
 Met Trp Cys Ala Ser Pro Val Ala Val Val Ala Phe Cys Ala Gly Leu  
           1                          5                          10                          15  
 Leu Val Ser His Pro Val Leu Thr  
   20

<210> 224  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           primer

<400> 224  
 aacgagctga agcagatgat ttg

24

<210> 225  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           primer

<400> 225  
 ttagccaact aaaaaggccc cga

23

<210> 226  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
           primer

<400> 226  
 gccaaactaaa aaggccccga a

21

<210> 227  
 <211> 23  
 <212> DNA  
 <213> Artificial Sequence



<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 227  
 attttgagaa cctctgagga aac

23

<210> 228  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 228  
 gtgagagaaa gaggtcctca ga

22

<210> 229  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 229  
 ccacccacca ccaccaatg

19

<210> 230  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 230  
 ggtgacacta tagaactcac ctatctcccc aaca

34

<210> 231  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 primer

<400> 231  
gggcccctgg aacagaactt c

21

<210> 232  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
primer

<400> 232  
gcgtagcatt taggtgacac t

21

<210> 233  
<211> 168  
<212> PRT  
<213> Homo sapiens

<400> 233  
Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala His Ile Thr Gly Thr  
1 5 10 15  
Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn Ser Lys Asn Glu Lys  
20 25 30  
Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser Ser Arg Ser Gly His  
35 40 45  
Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly Glu Leu Val Ile His  
50 55 60  
Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr Tyr Phe Arg Phe Gln  
65 70 75 80  
Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys Gln Met Val Gln Tyr  
85 90 95  
Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile Leu Leu Met Lys Ser  
100 105 110  
Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu Tyr Gly Leu Tyr Ser  
115 120 125  
Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp Arg Ile Phe  
130 135 140  
Val Ser Val Thr Asn Glu His Leu Ile Asp Met Asp His Glu Ala Ser  
145 150 155 160  
Phe Phe Gly Ala Phe Leu Val Gly  
165

<210> 234  
 <211> 84  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 nucleotide sequence

<400> 234  
 gccgccacca tgaagacctg ctggaaaatt ccagttttct tctttgtgtg cagtttctctg 60  
 gaacctgtgg catctgcaga attc 84

<210> 235  
 <211> 123  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 nucleotide sequence

<400> 235  
 ggatccctgg ttccgcgtgg ctcaggctca ttcgaaggta agcctatccc taaccctctc 60  
 ctccgtctcg attctacgcg taccggtrcat catcaccatc accatcacca tggaggacag 120  
 tga 123

<210> 236  
 <211> 6  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 6xHis tag

<400> 236  
 His His His His His His  
 1 5

<210> 237  
 <211> 8  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Synthetic  
 8xHis tag

<400> 237  
 His His His His His His His  
 1 5